THE CLAIMS

What is claimed is:

1. An isolated or synthesized cocoa polypeptide identified by SEQ ID NO:1, SEQ ID NO:2, or a fragment thereof comprising SEQ ID NO:3 or SEQ ID NO:4.

2. The fragment of claim 1, obtained by enzymatic degradation involving one or more of the following enzymes: aspartic endoproteinase, cysteine endoproteinase and carboxypeptidase.

3. The fragment according to claim 2, wherein the enzyme is derived from cocoa.

4. The polypeptide according to claim 1, which is further reacted with a reducing sugar.

5. An isolated or synthesized nucleotide sequence encoding the polypeptide of claim 1.

6. A cell containing one or more copies of the nucleotide sequence of claim 5.

7. A vector containing the nucleotide sequence of claim 5.

8. A cell containing the vector of claim 7.

9. The cell according to claim 6, which is a bacterial cell, a yeast cell, an insect cell, a mammalian cell or a plant cell.

10. A plant containing the plant cell of claim 9.

11. The plant of claim 10, wherein the plant is a cocoa plant.

12. A method of producing cocoa or chocolate flavor comprising isolating, synthesising or producing a polypeptide according to claim 1 and reacting the peptide with a reducing sugar.

13. A method of enhancing the cocoa or chocolate flavor of a composition, comprising supplementing the composition with one or more of the peptides of claim 1.

14. A method of producing cocoa or chocolate flavor comprising the steps of isolating, synthesising or producing one or more cocoa polypeptides identified by SEQ ID NO:1 and SEQ ID NO:2 or a fragment thereof comprising SEQ ID NO:3 or SEQ ID NO:4.

15. The method of claim 14, further comprising the step of reacting the peptide with a reducing sugar.

16. The method of claim 14, wherein the fragment thereof is obtained by subjecting a peptide identified by SEQ ID NO:1 or SEQ ID NO:2 to enzymatic degradation.

17. The method of claim 16, wherein the step of enzymatic degradation involves one or more of the following enzymes: aspartic endoproteinase, cysteine endoproteinase or carboxypeptidase.

18. The method of claim 17, wherein the enzyme is derived from cocoa.

19. A method of producing cocoa beans with increased cocoa flavor peptides, the method comprising transforming a cocoa cell with one or more of the nucleotide sequences of claim 5, and generating at least one cocoa plant from the transformed cell.

20. The method of claim 19, wherein the cell comprises at least 40 copies of the nucleotide sequence.